

A prefilter is not a functional equivalent of a "scaling filter".

At page 3 of the Office Action, the Office suggests that "Messing's prefilter is functionally equivalent to [the] claimed 'scaling filter.'" Applicants respectfully disagree. The Messing et al patent publication discloses in Figures 1 and 2 two methods for changing a higher resolution image to a lower resolution image. The first is to simply skip two out of three color pixels, as shown in Figure 1, where the red, green and blue content of a single pixel of the high resolution image is placed into strip-like pixels 10, 12 and 14, respectively, of a low resolution image. Thereafter, two pixels are skipped and the fourth pixel is then placed in the next pixel of the lower resolution triad display. Figure 2 is similar, but the red from one higher resolution image pixel 11 is placed in a first sub-pixel 10 of the lower resolution triad display, whereas the green and blue are respectively plucked from adjacent pixels of the higher resolution image and placed into the sub-pixels 12 and 14 of the lower resolution triad display. There is no scaling filter involved. Instead, pixels are not adjusted or scaled, but rather individual values of red, green and blue pixels of the higher resolution image are placed in sub-pixels of the lower resolution display.

This assertion of equivalency between pre-filters and scaling filters is the basis of the rejection and, having been shown to be inaccurate, Applicants respectfully request withdrawal of the rejection.

The Office Action also suggests that Applicants' recitation of a "rhombus-shaped" consideration area, which is an area processed by the scaling filter and in the input image is shown in both the Inuiya et al patent and the Shiraishi et al patent. Applicants respectfully submit that this is not the case.

Rhombus-shaped not applicable to Messing et al stripe topology

First, "rhombus" is defined as a parallelogram with four equal sides; an oblique-angled equilateral parallelogram according to the online definition of Wordreference.com English dictionary. This definition is supported by the original specification which illustrates an exemplary embodiment that the mask shape of the scaling filter which determines the value of a sub-pixel appropriate to a delta structure of pixels is a rhombus shape in which the horizontal axis is longer than the vertical axis as expressed by solid lines in Figure 6.

This is disclosed at the paragraph bridging pages 6 and 7 as being relevant to the delta-structure sub-pixels which cause more color fringes in a straight line boundary in a vertical direction, the value of an input pixel of the horizontal direction is disclosed as preferably having a bigger weighted value in determining the sub-pixel values than in a vertical direction. Because the Messing et al patent is a stripe topology, it would not benefit from a rhombus-shaped consideration area and, in fact, one could not be easily drawn insofar as it does not involve delta-structured sub-pixels. Stated differently, there is simply no reason to use a rhombus-shaped consideration area in the Messing et al. patent publication.

No suggestion to combine

In response to Applicants' earlier arguments, the Office apparently identified the arguments as asserting to non-analogous arts. While there is some question as to whether solid state imaging apparatuses are relevant to a method of rendering a color image on a display, Applicants' arguments were more directed to the concept that one skilled in the art would not be motivated to modify the display resolution

system of Messing et al by looking at solid state imaging apparatus such as in the Inuiya et al patent or a color image sensing device such as the Shiraishi et al patent even if *arguendo* they could be considered analogous. For instance, Figure 7B of the Inuiya et al patent discloses a honeycomb structure in which the apertures are photosensitive devices (pixels) in the image pick-up section may be arranged. Whatever relevance the configuration of pixels may have in the image sensing device, this relevance would not translate into defining a representative value of a sub-pixel in a display device corresponding to a rhombus-shaped consideration area in which an area processed by the scaling filter of an input image is used in obtaining the representative value. There is no relevance at all, and particularly no sense of a scaling filter which is used to make the resolution of an input image correspond to the resolution of a display apparatus. The Inuiya et al and Shiraishi et al patents are simply directed to other aspects of the total imaging system, but bear no relation to a scaling filter or the rhombus-shaped consideration area used therein as recited in the independent claims of the present application.

The hypothetical combination does not meet the claim recitations.

Even if for a moment one were to assume *arguendo* that the combination of the Inuiya et al and Shiraishi et al imaging devices could be combined in some manner with the display resolution system of the Messing et al patent publication, the hypothetical result would still not include a rhombus-shaped consideration area. It is necessary for the Office to consider the invention as a whole. Applicants have explained that in an image display device where delta-structured sub-pixels are used, the delta-structured sub-pixels cause more color fringes in the straight-line

boundary in a vertical direction. Applicants have disclosed that the value of an input pixel in the horizontal direction should have a larger weighted value in determining the sub-pixel values than in a vertical direction. This is the origin of the rhombus-shaped consideration area as disclosed in the paragraph bridging pages 6 and 7 for certain specific embodiments of the disclosure. The hypothetical combination proposed in the Office Action neither identifies nor addresses this particular problem, nor would it have been obvious to use a rhombus-shaped color filter in light of the secondary references in the stripe topography of the Messing et al patent publication, since such a rhombus-shaped consideration area would add no value apparent to the undersigned or apparent from the prior art in the Messing et al type system. There is no evidence of record to support the Office's position that this would prevent color moirés effect in color image displays of the Messing et al stripe topography.

In light of the foregoing, Applicants respectfully request reconsideration and allowance of the above-captioned application. Should any residual issues exist, the Examiner is invited to contact the undersigned at the number listed below.

Respectfully submitted,

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